

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Thomas M. Jessell, et al.  
U.S. Serial No. : Not Yet Known (Continuation Application  
of PCT/US99/22517, filed 29 September  
1999)  
Filed : Herewith  
For : GENE ENCODING MNR2 AND USES THEREOF

1185 Avenue Of The Americas  
New York, New York 10036  
March 29, 2001

Assistant Commissioner for Patents  
Washington, D.C. 20231  
Box: Patent Application

Sir:

PRELIMINARY AMENDMENT TO THE ACCOMPANYING CONTINUATION  
APPLICATION FILED UNDER 37 C.F.R. §1.53

Applicants request that the following amendment be made in the  
above-identified application:

In the Specification:

On page 1, after the title, please delete the first paragraph and  
insert the following new paragraph:

--This application is a continuation of PCT International  
Application No. PCT/US99/22517, filed 29 September 1999,  
designating the United States of America, which is a  
continuation-in-part and claims priority of U.S. Serial No.  
09/162,524, filed September 29, 1998, the contents of which  
are hereby incorporated by reference into the present  
application.--

In the Claims:

Please cancel claims 2-5, 7-13, 15, 17, 19-20, 22-23, 25-26, 28-  
33, 35-37, 39-43, 46-47, 51, 53-55, 58-59, 62-65, 67-73, 75, 77,  
79-80, 82-83, 85-86, 88-93, 95-97, 99-103, 106-107, 111, 113-115,  
and 118-119 without prejudice or disclaimer to applicants' right  
to pursue the subject matter of these claims in a future  
continuation or divisional application.

Please amend claims 16, 34, 44-45, 48, 76, 94, 104-105, and 108  
as follows:

16. (Amended) A method of producing a polypeptide having the biological activity of a mammalian MNR2 which comprises growing the host cells of claim 14 under suitable conditions permitting production of the polypeptide.
34. (Amended) An antibody directed to an epitope of an MNR2 protein of claim 27.
44. (Amended) A method of producing the isolated protein of claim 27 which comprises:
  - (a) inserting a nucleic acid molecule encoding a MNR2 protein into a suitable vector;
  - (b) introducing the resulting vector into a suitable host cell;
  - (c) selecting the introduced host cell for the expression of the MNR2 protein;
  - (d) culturing the selected cell to produce the MNR2 protein; and
  - (e) recovering the MNR2 protein produced
45. (Amended) A method of inducing differentiation of somatic motoneurons in a subject comprising administering to the subject the purified MNR2 protein of claim 27 in an amount effective to induce differentiation of somatic motor neurons in the subject.
48. (Amended) A pharmaceutical composition comprising a purified MNR2 protein of claim 27 and a pharmaceutically acceptable carrier.
76. (Amended) A method of producing a polypeptide having the biological activity of a mammalian HB9 which comprises growing the host cells of claim 74 under suitable conditions permitting production of the polypeptide.
94. (Amended) An antibody directed to an epitope of an HB9 protein of claim 87.

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104. (Amended) A method of producing the isolated protein of claim 87 which comprises:
- (a) inserting a nucleic acid molecule encoding a HB9 protein into a suitable vector;
  - (b) introducing the resulting vector into a suitable hostcell;
  - (c) selecting the introduced host cell for the expression of the HB9 protein;
  - (d) culturing the selected cell to produce the HB9 protein; and
  - (e) recovering the HB9 protein produced.
105. (Amended) A method of inducing differentiation of somatic motor neurons in a subject comprising administering to the subject the purified HB9 protein of claim 87 in an amount effective to induce differentiation of somatic motor neurons in the subject.
108. (Amended) A pharmaceutical composition comprising a purified HB9 protein of claim 87 and a pharmaceutically acceptable carrier.

#### REMARKS

This application is a continuation of PCT International Application No. PCT/US99/22517, filed 29 September 1999, designating the United States of America, which is a continuation-in-part and claims priority of U.S. Serial No. 09/162,524, filed September 29, 1998. Accordingly, the parent application, PCT International Application No. PCT/US99/22517, is pending today in the United States of America pursuant to 35 U.S.C. §363, and the subject continuation application is co-pending therewith in fulfillment of the provisions of 35 U.S.C. §120.

By this Preliminary Amendment, applicants have hereinabove amended the specification on page 1 to insert the continuation data. Applicants maintain that the amendments made hereinabove do not raise any issue of new matter. Accordingly, applicants respectfully request entry of the Amendment.

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Claims 1-124 were pending in the subject application. By this Amendment applicants have canceled claims 2-5, 7-13, 15, 17, 19-20, 22-23, 25-26, 28-33, 35-37, 39-43, 46-47, 51, 53-55, 58-59, 62-65, 67-73, 75, 77, 79-80, 82-83, 85-86, 88-93, 95-97, 99-103, 106-107, 111, 113-115, and 118-119 without prejudice or disclaimer to applicants' right to pursue the subject matter of these claims in a future continuation or divisional application. Applicants have hereinabove amended claims 16, 34, 44-45, 48, 76, 94, 104-105, and 108. Applicants maintain that these amendments are made only to make the amended claims dependent on pending claims and do not raise any issue of new matter. Accordingly, upon entry of this Amendment, claims 1, 6, 14, 16, 18, 21, 24, 27, 34, 38, 44-45, 48-50, 52, 56-57, 60-61, 66, 74, 76, 78, 81, 84, 87, 94, 98, 104-105, 108-110, 112, 116-117, and 120-124 will be pending and under examination.

Pursuant to 37 C.F.R. §1.121(c)(1)(ii), applicants attach hereto as Exhibit A a version of the amended claims marked up to show the changes relative to the previous version thereof.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicant's undersigned attorney invites the Examiner to telephone him at the number provided below.

No fee other than the filing fee of \$913.00, is deemed necessary in connection with this Preliminary Amendment. However, if any additional fee is required, authorization is hereby given to charge the amount of such fee to Deposit Account No. 03-3125.

Respectfully submitted,



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**Amended Claims:**

16. (Amended) A method of producing a polypeptide having the biological activity of a mammalian MNR2 which comprises growing the host cells of claim[15] 14 under suitable conditions permitting production of the polypeptide.
34. (Amended) [A monoclonal] An antibody directed to an epitope of an MNR2 protein of claim [33]27.
44. (Amended) A method of producing the isolated protein of [either of] claim[s] 27 [or 28] which comprises:
  - (a) inserting a nucleic acid molecule encoding a MNR2 protein into a suitable vector;
  - (b) introducing the resulting vector into a suitable host cell;
  - (c) selecting the introduced host cell for the expression of the MNR2 protein;
  - (d) culturing the selected cell to produce the MNR2 protein; and
  - (e) recovering the MNR2 protein produced.
45. (Amended) A method of inducing differentiation of somatic motorneurons in a subject comprising administering to the subject the purified MNR2 protein of [either of] claim[s] 27 [or 28] in an amount effective to induce differentiation of somatic motor neurons in the subject.
48. (Amended) A pharmaceutical composition comprising a purified MNR2 protein of [either of] claim[s] 27 [or 28] and a pharmaceutically acceptable carrier.
76. (Amended) A method of producing a polypeptide having the biological activity of a mammalian HB9 which comprises growing the host cells of claim [65] 74 under suitable conditions permitting production of the polypeptide.
94. (Amended) [A monoclonal] An antibody directed to an epitope of an HB9 protein of claim [93] 87.

104. (Amended) A method of producing the isolated protein of [either of] claim[s] 87 [or 88] which comprises:

- (a) inserting a nucleic acid molecule encoding a HB9 protein into a suitable vector;
- (b) introducing the resulting vector into a suitable host cell;
- (c) selecting the introduced host cell for the expression of the HB9 protein;
- (d) culturing the selected cell to produce the HB9 protein; and
- (e) recovering the HB9 protein produced.

105. (Amended) A method of inducing differentiation of somatic motor neurons in a subject comprising administering to the subject the purified HB9 protein of [either of] claim[s] 87 [or 88] in an amount effective to induce differentiation of somatic motor neurons in the subject.

108. (Amended) A pharmaceutical composition comprising a purified HB9 protein of [either of] claim[s] 87 [or 88] and a pharmaceutically acceptable carrier.